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10/649,702

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EXAMINER

GREY, CHRISTOPHER P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|---------------------------------------|--|
| Office Action Summary | Application No. 10/649,702 | Applicant(s) AKIYAMA ET AL. | |
| | Examiner CHRISTOPHER P. GREY | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 and 5-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (US 6731600), hereinafter referred to as Patel, in view of Fichou et al. (US 6690646), hereinafter referred to as Fichou.

Claim 1 Patel discloses an input unit that inputs image data (Col 5 lines 46-54, server computer maintains and stores data objects of any type including picture/images, where the memory needed for storage is equivalent to an input).

said monitoring trigger information generating unit (fig 2, TX BW detector, where the detector examines the header info for an identifier equivalent to the monitoring trigger info, and the detector detects rate info) that generates monitoring information (Col 10 lines 5-25, where the identifier is inserted in the header and Col 10 lines 42-52 where this ID is generated from the header at the client and it is determined if data is sent back to back) and that performs a receiving bit rate monitoring at a receiving side (fig 2, 206, where the tx BW detector detects/monitors bit rate).

an image reconstruction unit that reconstructs said image data and said monitoring trigger information (Col 6 lines 1-3, where the rendering system 202 in fig

2 renders/reconstructs the received/image data, and Col 10 lines 42-46, where the client determines/reconstructs if the packets are back to back from the monitoring trigger info/identifier inserted by the server);

a communications unit that transmits and receives data to and from a terminal through a communication path(**fig 4, where the server computer is in communication with the client computer, thus any component within the server computer used for communication is equivalent to a communication unit**);

wherein said image data reconstruction unit inserts said generated monitoring trigger information into image data input through said input (**Col 10 lines 5-25, where the identifier is inserted in the header**).

wherein said communication unit transmits a data fragment, which includes said image data, said monitoring trigger information (**Col 10 lines 5-25, where the identifier is inserted in the header and Col 5 lines 46-55 for motion/image data**).

detecting a completion of said receiving bit rate monitoring (**Col 13 lines 1-7, wherein monitoring occurs until the entire object is received. Also, within the cited paragraph, Patel teaches that monitoring can occur at a percentage of transmission of the data object, such as per fragment as claimed**).

Wherein when said communication unit receives an image bit rate switching request command from said terminal (**fig 4, 426, server computer receives calculated transmission bandwidth from client/receiving computer**), said bit rate switching control unit controls said image data reconstruction unit to change an image bit rate by changing an image size (**Col 12 lines 1-3, the unit being used to adjust the**

transmission rate in the server is equivalent to the reconstruction unit, where changing the transmission rate, changes the size of the data per unit time)

Patel does not specifically disclose a data fragment which includes data size information for detecting the completion of monitoring.

Fichou discloses a data fragment which includes data size information **(Col 9 lines 42-44, extracting a size from the header)** for detecting the completion of monitoring **(fig 5, 515, where it is determined that the monitoring period has ended, however, Patel has already taught that a time interval may be replaced with a size or percentage of transmission as discussed above).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the system of Patel as taught by Fichou, since stated in fig 5, 515, that such a modification will provide a determination to the ending of a monitoring time.

Claim 3 Patel discloses wherein as said monitoring trigger information, a transmission start time for a data fragment to be transmitted next is inserted into image data to be distributed **(Col 8 lines 14-16, subsequent timestamps and fig 3, 312).**

Patel does not specifically disclose an extension part of the image data, however, it would have been obvious to one of the ordinary skill in the art at the time of the invention that the dedicated portion of the data where the timestamp is inserted is equivalent to an extension because without the insertion of the timestamp that

dedicated portion is unnecessary. The motivation for this extension is to transmit timestamp information at predetermined intervals **(Col 9 lines 30-35)**.

Claim 5 Patel discloses a communication unit that receives a data fragment from a distribution server through a communication path **(fig 1, 110, server, and the communication path is the path which the data travels from 110 to 112)**.

wherein the data fragment includes said image data, said monitoring trigger**(Col 10 lines 5-25, where the identifier is inserted in the header)**.

a reproducing unit that reproduces received image data **(fig 2, 202, and Col 6 lines 1-3, displaying the object to the user is equivalent to reproducing)**.

a monitoring unit that monitors a receiving bit rate of said received data fragment **(fig 2 206)**.

an analysis unit that analyzes said received data fragment **(fig 2, 204 or 206, where detecting is equivalent to analyzing)**.

said analysis unit extracts a monitoring trigger from said data fragment **(Col 10 lines 42-52, where examination of the header is equivalent to analysis, and examining the header to make a determination is equivalent to extracting the given information, where extraction in its broadest sense is defined as to obtain or deduce)**.

Wherein said monitoring unit calculates a receiving bit rate **(fig 4, 420, where BW is calculated)** based on a time between a receiving start time of said data fragment specified by a monitoring trigger included in the previous data fragment **(fig 3, 300**

where this info is sent previous to another time stamp 312, and the timestamp indicates the start time) and a time when receiving of said data fragment finishes specified by said data size information **(fig 3, 312, where another time stamp is sent and received and see fig 4, 404-422).**

said monitoring unit feeds the distribution bit rate switching information of said image data through said communication unit in response to said receiving bit rate to be monitored **(fig 4, 426 and Col 12 lines 1-3).**

Patel does not specifically disclose the data fragment including data size information. Patel also disclose not specifically disclose the fragment being specified in said data size information and reading out said data size information from said data fragment.

Fichou discloses the data fragment including data size information **(Col 9 lines 42-44, size PS is extracted from the header, where the size PS is equivalent to a fragment size as the term fragment is not clearly defined within the claim and is open to broad interpretation)** and reading out said data size information from said data fragment **(see Patel fig 4, 414, where Patel indicates that the size information taught by Fichou can be read out).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the system of Patel as taught by Fichou, since stated in fig 5, 515, that such a modification will provide a determination to the ending of a monitoring time.

Claim 6 Patel discloses a timer that counts **(fig 3, wherein the client computer measures a base time and makes reference to a clock).**

Patel discloses wherein said monitoring unit compares the time of said timer with said receiving start time specified by said monitoring trigger **(fig 4, 412, where the time of the completion of receipt of first packet is equivalent to the start time specified by monitoring trigger, as the monitoring trigger specifies that the next packet is a back to back packet immediately following the first packet)** included in the previous data fragment **(fig 3, where the time stamp contained in 300 is previous to the one in 312)** and starts said monitoring of the receiving bit rate from said receiving start time **(fig 4, 422 where a bandwidth is calculated/monitored).**

Claim 7 Patel discloses wherein said monitoring unit compares a measured receiving bit rate **(Col 11 lines 28-29, current bandwidth)** with a bit rate switching condition recorder in a recording unit and feeds said bit rate switching information in response to a result of said comparison **(Col 11 line 62-Col 12 line 3, wherein Patel discloses adjusting a transmission rate based on a comparison of current bandwidth with some form of threshold that defines whether or not a bandwidth is too high or too low, where this threshold is stored within the software disclosed in the citation).**

Claim 8 Patel discloses wherein said monitoring unit monitors a residual amount of said received image data stored at a recording unit **(Col 11 lines 62-65, determined**

BW), compares it with a bit rate switching condition recorded in a recording unit and feeds said bit rate switching information in response to a result of said comparison (**Col 11 line 62-Col 12 line 3, wherein Patel discloses adjusting a transmission rate based on a comparison of current bandwidth with some form of threshold that defines whether or not a bandwidth is too high or too low, where this threshold is stored within the software disclosed in the citation).**

Claim 9 Patel discloses a decoder that decodes said received image data (**fig 2, 202, where a rendering system is equivalent to a decoder, where the packet data requires at the receiver, decoding for display).**

Wherein said monitoring unit monitors a frame rate of said decoder, compares it with a bit rate switching condition recorded in a recording unit and feeds said bit rate switching information in response to a results of said comparison (**Col 11 line 62-Col 12 line 3, wherein Patel discloses adjusting a transmission rate based on a comparison of current bandwidth with some form of threshold that defines whether or not a bandwidth is too high or too low, where this threshold is stored within the software disclosed in the citation).**

Claim 10 Patel discloses wherein said monitoring unit monitors a time stamp included in said received image data (**fig 3, where the client determines a time stamp send from the source**), compares it with a bit rate switching condition recorded in a recording unit and feeds said bit rate switching information in response to a result of

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said comparison (**fig 3, where a latency which is determined from the time stamp, is compared to a bit rate switching condition in 308**).

Claim 13 Patel discloses a display unit that displays said received image data (**fig 1 teaches client and server computers, where within the art it is common for these computers to have a monitor of some sort for display**).

Patel discloses an input instruction unit that receives an input from a user. Patel discloses wherein an instruction changes bit rate through said input instruction unit in regard to the image data displayed at said display unit being received and said instruction being fed as said switching information (**Col 12 lines 1-3, where Patel teaches adjusting or switching a transmission rate via a software component. However, one skilled on the art can appreciate that if it can be implemented in software, it also can be implemented by user inputting information, which is nothing new within the art**).

Response to arguments

2. The applicants arguments filed on 3/6/08 are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571)272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2616

/Christopher P Grey/
Examiner
Art Unit 2616